

**PATIENT PRESENTING CLINICAL SIGNS**

Luna Rosas  
History: Patient presents for anorexia x 4 days, recently feeling better and eating per owner. Abnormal PE/Chem/CBC/UA Results: Elevated renal and pancreatic enzymes.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**BREED**

Yorkshire Terrier

The left kidney is small (2.86 cm). The right kidney is compensatorily large (3.76 cm). Both kidneys are irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed.

**SEX**

Female Spayed

**Adrenal Glands**

The left adrenal gland is normal in size (1.55 cm long, 0.51 cm at cranial pole and 0.69 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**AGE**

14 years

The right adrenal gland is normal in size (1.53 cm long, 0.79 cm at cranial pole and 0.53 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**WEIGHT**

11 lbs

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**IMAGING PERFORMED BY**

Kelly Vazquez

Gallbladder is mildly distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

**HOSPITAL NAME**

Dr. Pathak

**Gastrointestinal**

The visible stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**REFERRING VET**

Ridge Road AH

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease.

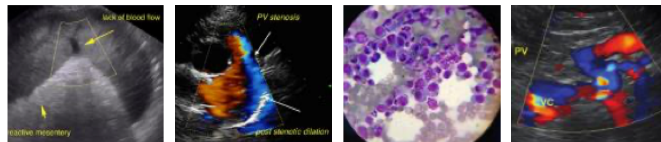
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The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

**DATE**

4.17.23



**PATIENT**

Luna Rosas

**Pancreas**

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**SPECIES**

Canine

**Free Abdomen**

There is no evidence of free peritoneal effusion noted in these images. There is no apparent lymphadenopathy noted in these images.

**BREED**

Yorkshire Terrier

**ULTRASONOGRAPHIC FINDINGS**

- Chronic Kidney Disease – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.
- Mild gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

**SEX**

Female Spayed

**AGE**

14 years

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is no ultrasonographically definitive evidence of pancreatic and/or bowel disease. However, that doesn't rule it out. Therefore, further evaluation could be considered in the form of a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory for further evaluation of GI and pancreatic function.

**WEIGHT**

11 lbs

Given the appearance of the kidneys, chronic kidney disease is suspected, and if not recently evaluated, especially given the reported "increased kidney values", a urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

**INTERPRETED BY**

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DACVIM

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**HOSPITAL NAME**

Dr. Pathak

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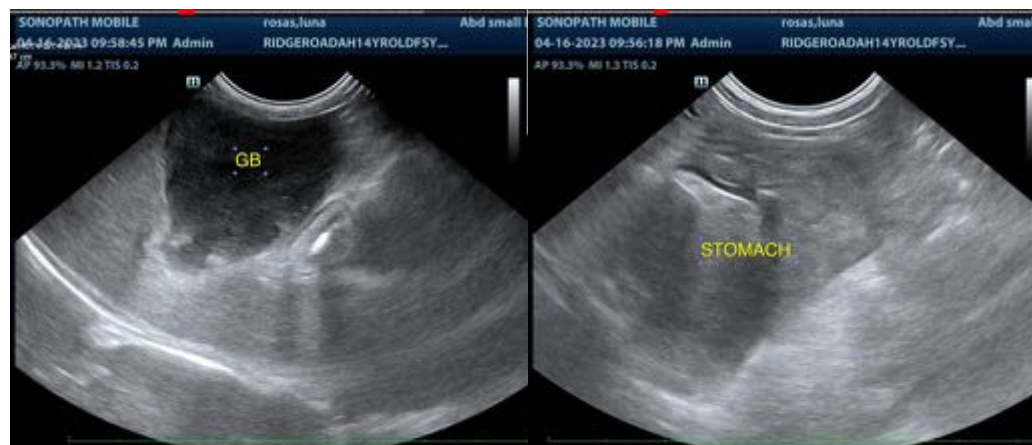
Ridge Road AH

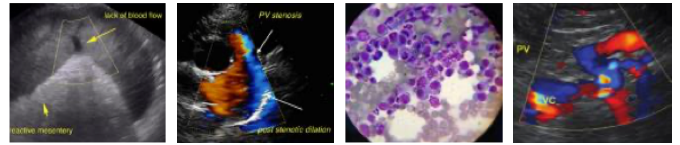
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

**Beth Johnson, DVM, DACVIM**  
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